S/N: 10/699,383 Reply to Office Action of December 2, 2004

Amendments to the Specification:

Please amend the paragraph beginning on page 18, at line 14 as shown below:

Figure 3 is a plot of the overdrive clutch pressure, the intermediate clutch pressure, the overall transmission ratio, and the percent shift completion plots for the Simpson gearset and the overdrive gearset during a 2-3 upshift event. The shift progression, expressed as percentages, is shown on the ordinate of Figure 3, together with pressure. The overall transmission ratio is plotted as shown at 110, the pressure of intermediate clutch pressure 109 is plotted as shown at 112, the pressure of overdrive clutch pressure 90 is plotted as shown at 114, the percent shift complete at any instant during a shift event for the Simpson gearset is shown at 116, and the percent shift complete for the overdrive gearset at any instant during the shift event is shown at 118. Clutch 109 corresponds to brake B2 in Figures 1a-1d and B2 or C4 in Figure 1f. At the beginning of the shift, the overall transmission ratio at point 120 in the embodiment of the invention described with reference to Figure 2b is 2.201. At the end of the shift, at point 122, the overall transmission ratio for the transmission described with reference to Figure 2b is 1.538. To effect a 2-3 upshift, the overdrive friction element must be released and the Simpson gearset friction element must be applied. Thus, the overdrive pressure shown at 114 is dropped, beginning at point 120, until it reaches a low value, as shown at 124.

Please amend the paragraph beginning on page 22, at line 27 as shown below:

As indicated at the central regions of Figures 4a, 4b and 4c, there is a simultaneous ratio change for both the Simpson gearset upshift and the overdrive gearset downshift. The overdrive gearset downshift is achieved by controlling the

S/N: 10/699,383 Reply to Office Action of December 2, 2004

pressure of the friction element. Once the overdrive gearset begins its downshift, the transmission rate of ratio change will decrease, as shown at 164. The Simpson gearset and the overdrive gearset dynamically interact with each other during this simultaneous ratio change, as will be explained subsequently. During a power-on 2-3 upshift, the ratio change control for both the Simpson gearset and the overdrive gearset is handled by two coupled closed-loop controllers shown at the lower right-hand corner of Figure 6 and the upper right-hand corner of Figure 6, respectively. A power-off shift, in contrast, uses an open-loop control at this time.